

PROVINCE OF SASKATCHEWAN



**08-09**

ANNUAL REPORT

**MINISTRY OF HEALTH**

Saskatchewan Health  
Information Network



---

## Table of Contents

Letter of Transmittal .....	2
Letter from the Board Chair .....	4
Letter from the CEO .....	6
Introduction .....	7
Alignment with Government's Direction .....	7
Overview .....	8
Mandate .....	8
Mission and Values .....	9
Progress in 2008-09 .....	10
Health Sector Priorities .....	11
The iEHR - Progress by Core Business Area .....	11
Projects and Data Warehouses (iEHR Components) .....	12
Registries and Access Layer (The iEHR Glue) .....	14
Provider Systems (iEHR Access Points) .....	15
Canada Health Infoway Investment .....	17
Supporting the Electronic Communication Needs of the Ministry of Health and of Health Care	
Providers in the Regions .....	18
Technology Support Services .....	18
Service Desk .....	18
Privacy and Security .....	20
Other Services .....	21
Management's Responsibilities .....	22
2008-09 Financial Overview .....	23
Auditor's Report .....	26
2007-08 Financial Statements .....	27
Notes to the Financial Statements .....	30
Appendices	
I. Saskatchewan Health Information Network (SHIN) Organizational Chart .....	36
II. Electronic Health Record progress nationally as reported by Canada Health Infoway .....	37
III. Acronyms .....	38

*This annual report is also available in electronic format from the Ministry of Health website at  
<http://www.health.gov.sk.ca/shin-annual-report-2008-2009.pdf>*

# Letter of Transmittal



Regina, Saskatchewan  
July 31, 2009

The Honourable Gordon L. Barnhart,  
Lieutenant Governor of Saskatchewan

## ***May it please Your Honour:***

The Government of Saskatchewan is committed to delivering and building on its promises to Saskatchewan people. One of those promises is a commitment to increased transparency and accountability.

A significant number of commitments were made to Saskatchewan people in Government's first year of holding office. These include commitments made in: the election platform, the fall 2008 Speech from the Throne, the Ministers' Mandate letters, and the 2008-09 Budget Summary.

The 2008-09 Saskatchewan Health Information Network Annual Report demonstrates progress toward the commitments that relate to this Corporation as of March 31, 2009.

Government has defined its direction for ministries and agencies and has communicated

this direction through a vision and goals released with the 2009-10 Budget. Ministries and agencies have aligned with this direction and have developed strategies and actions to help deliver on government's plan for Saskatchewan – to be Strong and Steady in the years to come.

The initiatives pursued in 2008-09, and the results achieved, are communicated to the legislature and to the Saskatchewan people through this report. The results achieved within government's first year provide a foundation for establishing priorities and influencing future government's activities. Therefore, the annual reports are not only an important accountability document, but they can help to inform future planning and resource allocation in the upcoming years.

Our province is building a secure, integrated provincial e-Health system. The benefits are enormous in improving patient safety; reducing wait times and duplicate testing; providing better tools for our health human resources; improving planning and increasing financial accountability for the health care system.

Providing the best workplaces equipped with the right tools to support decision-making and treatment will strengthen recruitment and retention efforts and enable the province to increase the number of health care providers choosing to work here.

I am proud that our Saskatchewan-born solutions, our ability to share with other provinces, and our careful planning and resource management, have positioned us so well in the country. High praise has been received from Canada Health Infoway noting that Saskatchewan's approach is innovative and worthy of replication.

---

I respectfully submit the Annual Report of the Saskatchewan Health Information Network (SHIN) for the fiscal year ending March 31, 2009, including the financial statements duly certified by auditors for the Corporation in accordance with *The Crown Corporations Act*, 1993.

A handwritten signature in black ink, appearing to read 'Don McMorris', with a stylized 'D' and 'M'.

Honourable Don McMorris  
Minister of Health

# Letter from the Board Chair

The content of this report has been thoroughly reviewed and I accept responsibility for this report and offer assurance for the accuracy and reliability of the information contained in it. This report is restricted to the activities and operations of the Saskatchewan Health Information Network (SHIN). The interpretation embedded in the reporting reflects the best judgment of the SHIN executive.

Saskatchewan residents expect the best medical treatment possible. Their physicians and clinicians expect to care for them using the most current practice available. Authorized health professionals must have secure access to the right information, at the right time and place.

The future of SHIN is changing to better meet the needs of Saskatchewan residents and to support the business of our health providers, regions and the Saskatchewan Cancer Agency. This year, eHealth Council was established with representatives from all these agencies. This Council will help to shape the future of the Electronic Health Record in Saskatchewan and focus priorities.

SHIN is committed to creating a provincial Electronic Health Record that will change the current reality. It is our vision that an integrated Electronic Health Record (iEHR) will be available for all Saskatchewan residents by 2013-14.

Our efforts are already making a difference to Saskatchewan people.

Today, a daughter accompanies her elderly mother to the emergency room in Swift Current. The mother is having difficulty speaking and is complaining of numbness and weakness on the left side of her body. The physician suspects a stroke and orders a CT (computed tomography) scan of her head. Rapid treatment of stroke is critical to improved outcomes. The CT scan is immediately uploaded to a secure provincial database so that a neurologist in Saskatoon can view the scan and provide timely treatment advice to the Swift Current physician.

Today, every prescription that Saskatchewan residents receive is captured and stored in the Pharmaceutical Information Program (PIP). In Yorkton, a man collapses on the street for unknown reasons. Helpful bystanders immediately call an ambulance. The man is having a heart attack. On arrival at the hospital, physicians are fortunate to find the unconscious and unidentified man's health card on his person. The physicians access PIP and find that the man is already receiving heart medications. This information guides patient treatment and avoids introducing a contraindicated drug.

Today, a patient in La Ronge is able to have a real-time, interactive visit with her specialist in Saskatoon via video-conferencing. She has severe diabetes and regular follow-up with her endocrinologist is critical. Using Telehealth saved her a very long drive through harsh winter conditions and allows for more frequent interaction.

Today, emergency physicians and other care providers in Regina have access to a system that integrates lab, medication and digital images like CT scans. In a very real way, this is the first functional Electronic Health Record in the province and an example of what can be done provincially.

The Electronic Health Record is important to patients, but it is also important to physicians, nurses and other care providers. Providers expect this technology because it helps them do their job better. It has become vital to recruitment and retention.

Health care providers, who in their private lives do online banking or book airline tickets in a matter of minutes, deserve improved technology in their workplaces. Physicians will finally be able to practice medicine using the vast amount of information that can be securely stored and accessed electronically from any location in the province.

Our health system provides 33,000 services to Saskatchewan residents every day. Each day there are 2,100 patients in hospital beds; 12,400 physician visits; 257 surgeries performed; and 5,000 units of home-care services are provided. Until components of the Electronic Health Record come on stream, the results of many of these encounters will be locked in file cabinets. Our residents travel the province, but their medical information does not.

Until the Electronic Health Record is functional, your health information in Melfort cannot be used by physicians at Royal University Hospital in Saskatoon and any parts of your past medical history that you cannot remember may not be taken into consideration. The problem is even larger than that. In Canada, almost 68 per cent of the time, your medical information won't reach the specialist before you do and you may be sent for more tests and invited to visit again. Out of every 1,000 laboratory and radiology tests done in Canada, up to 150 are unnecessary duplicates.

As a province, we need to do more than just collect patient medical information in file cabinets. We need the ability to integrate all of this information and to have it readily available to authorized health providers. We have to be able to manage the data and transmit it to the places where health care decisions are being made, all while respecting patient confidentiality. Our secure systems must provide healthcare professionals with reliable access to the most accurate and complete patient information available, enabling better decisions about diagnosis and treatment.

Through careful planning and resource management, Saskatchewan has invested minimal funding compared to the investment of other provinces but our results still place us as leaders in the country. In fact, Canada Health Infoway endorses Saskatchewan's approach and architecture as being innovative and worthy of replication by other provinces.

Reflecting on the past year, I would like to thank staff and all of our partners and stakeholders for their hard work and dedication to moving e-Health forward in this province. I anticipate another exciting and productive year in 2009-10.



Max Hendricks  
Board Chair - SHIN

# Letter from the CEO

In Saskatchewan, our Electronic Health Record is well on the way. Recently two tables (Appendix II) created by Canada Health Infoway confirmed SHIN's positive outlook. The province was fourth in the nation in 2008 for progress towards an Electronic Health Record and was on target to be fourth in the nation for March 2009.

We've built a strong foundation. Important systems like patient and provider registries are not made of brick and mortar and that makes them hard to visualize. Nevertheless, they are impossible to go forward without. These systems confirm the identity of residents when they access services and the identity of their providers when they access medical information. The Integrated Electronic Health Record (iEHR) cannot exist without these systems in place.

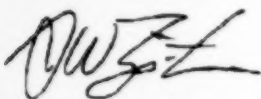
The capabilities of the Pharmaceutical Information Program (PIP) system in Saskatchewan lead the country. Since implementation in 2005, PIP is available to all community pharmacies and health regions and in emergency rooms across the province. PIP contains information on over 45 million prescription records and has the ability to facilitate the prescribing of medications electronically. The province is currently incorporating PIP into the computer systems used by community pharmacies so they don't have to rely on PIP viewer to access the system.

The Radiology Information System/Picture Archiving and Communication System (RIS/PACS) network continues to grow. The province has implemented RIS and PACS in 6 of 11 major acute care facilities. These 11 facilities represent 95 per cent of radiologists and 85 per cent of all diagnostic imaging in province. Our system will be a one of a kind system nationally given the number of different technologies putting images into PACS and the breadth of coverage. As of March 31, 2009, there were 350,797 studies and 19,560,706 images stored in the provincial PACS system.

In the coming fiscal year, we are working on development of a provincial laboratory results database and the electronic systems to connect all iEHR components together. We are creating a fully electronic patient chart in Saskatchewan hospitals and implementing electronic medical record systems in physicians' offices.

The development of an e-health strategy requires attention to privacy and security. We work closely with the Office of the Saskatchewan Information and Privacy Commissioner when developing our policies and practices. Through media campaigns, posters, brochures and web site materials, residents are informed of SHIN's privacy and security procedures and of their option to mask their personal health information.

I look forward to the successes that lay before us, and I am grateful for the work of stakeholders and staff to bring us to this point. The next phase of our e-Health rollout promises to be just as exciting.



Scott Livingstone  
Chief Executive Officer - SHIN



## Introduction

This annual report presents the Corporation's activities and results for the fiscal year ending March 31, 2009. It reports on public commitments made and other key accomplishments of the Saskatchewan Health Information Network.

As a transition year, the 2008-09 SHIN Annual Report follows a similar format to the 2007-08 SHIN Annual Report, and also includes the Government's vision and three goals.

The first part of this report outlines the project and program areas of the province's developing Electronic Health Record and the systems that glue them all together.

The second part of the report tells the story of the "behind the scenes" electronic systems that make up the electronic network for the Ministry of Health and health stakeholders in the province, including the health regions.

The final section of the report reflects the financial position of SHIN.

## Alignment with Government's Direction

The Saskatchewan Health Information Network's 2008-09 Annual Report aligns with Government's vision and three goals:

### Our Government's Vision

A secure and prosperous Saskatchewan, leading the country in economic and population growth, while providing a high quality of life for all.

### Government's Goals

- Sustain Economic Growth for the benefit of Saskatchewan People, ensuring the economy is ready for growth and positioning Saskatchewan to meet the challenges of economic and population growth and development.
- Secure Saskatchewan as a safe place to live and raise a family where people are confident in their future, ensuring the people of Saskatchewan benefit from the growing economy.
- Keep Government's Promises and fulfill the commitments of the election, operating with integrity and transparency, accountable to the people of Saskatchewan.

Together, all ministries and agencies support the achievement of Government's three goals, and work towards a secure and prosperous Saskatchewan.

Saskatchewan E-Health projects improve patient care, introduce efficiencies and provide for better decision making at the point of care. SHIN supports our Minister's mandate to improve publicly funded healthcare and to recruit and retain health care providers.

# Overview

The Saskatchewan Health Information Network (SHIN) was created as a Treasury Board Crown Corporation in 1997 and is accountable to Cabinet through the Minister of Health. Legislative authority is provided by *The Crown Corporations Act*, 1993.

SHIN is funded in part by the Saskatchewan Ministry of Health and managed by the Health Information Solutions Centre (HISC); a branch of the Saskatchewan Ministry of Health.

SHIN has no employees; all work is carried out through contracted resources or HISC personnel.

No significant changes to the structure or mandate of SHIN were made during 2008-09.

Please see the organization chart found in Appendix I.

SHIN contributes to an efficient, effective and sustainable health system by building an Electronic Health Record which ensures:

- residents' health information is accessible to health care providers regardless of the location where residents seek care;
- an enhanced quality of patient care by supporting health professionals' decision-making through improved access to the information they require;
- a safer work environment for health system employees; and
- a more dynamic environment to recruit and retain recent graduates into the Saskatchewan health system by implementing up-to-date technology.

Key partners for SHIN are:

- the Ministry of Health;
- Regional Health Authorities;
- Saskatchewan Medical Association;
- organizations representing health care professionals; and,
- Saskatchewan information technology contracting companies

## Mandate

The key roles of SHIN are:

- to provide information management and technology services to regional health authorities and other health service providers and delivery agencies within Saskatchewan;
- to deliver an Electronic Health Record for Saskatchewan citizens; and,
- to support health sector initiatives, provide a province-wide health information network and secure centrally-hosted health care applications in the HISC data centre.

Through a collaborative effort, SHIN ensures health professionals have secure access to the right information, at the right time and place.

---

## Mission and Values

### Mission

- enhance the quality of patient care by supporting health professionals' decision-making at the point of care through improved access to the information they require;
  - improve the patient experience by supporting improved coordination between service delivery care providers. Provide high levels of security and privacy safeguards to support the exchange of information between care providers;
  - improve overall efficiency, effectiveness and sustainability of the health sector through the innovative use of technology; and,
  - inform health system decision-making by providing the necessary information base to support planning, outcome measurements, accountability and research.
- equitable access to information for our customers' and,
  - fostering development of information technology in the Saskatchewan health-care sector.

### Values

We believe in:

- excellence through innovation, creativity, continuous learning and recognition of achievements;
- honesty, integrity, openness and respect for all of our relationships;
- collaboration and teamwork;
- actions which are client-centered and results-oriented;
- security of information and privacy of individuals;

---

## Progress in 2008-09

### Health Sector Priorities

E-Health tools, created through SHIN, respond to the priorities and plans of the ministry, E-Health Council, regional health authorities and other stakeholders.

The Ministry of Health provides strategic leadership and project management support to define, coordinate and implement health information technology solutions.

Regional health authorities identified the following health sector priorities:

- applications;
- communicable disease management;
- continued rollout of Integrated Clinical Systems;
- data quality, reporting & decision support;
- diagnostic imaging;
- improved prescribing & patient safety;
- primary health care;
- provincial registries & systems;
- Saskatchewan Surgical Care Network; and,
- Telehealth & video conferencing.

An Interoperable Electronic Health Record (iEHR) provides a secure and private lifetime record of an individual's key health history and care. It provides a longitudinal "cradle to grave" view of clinical information.

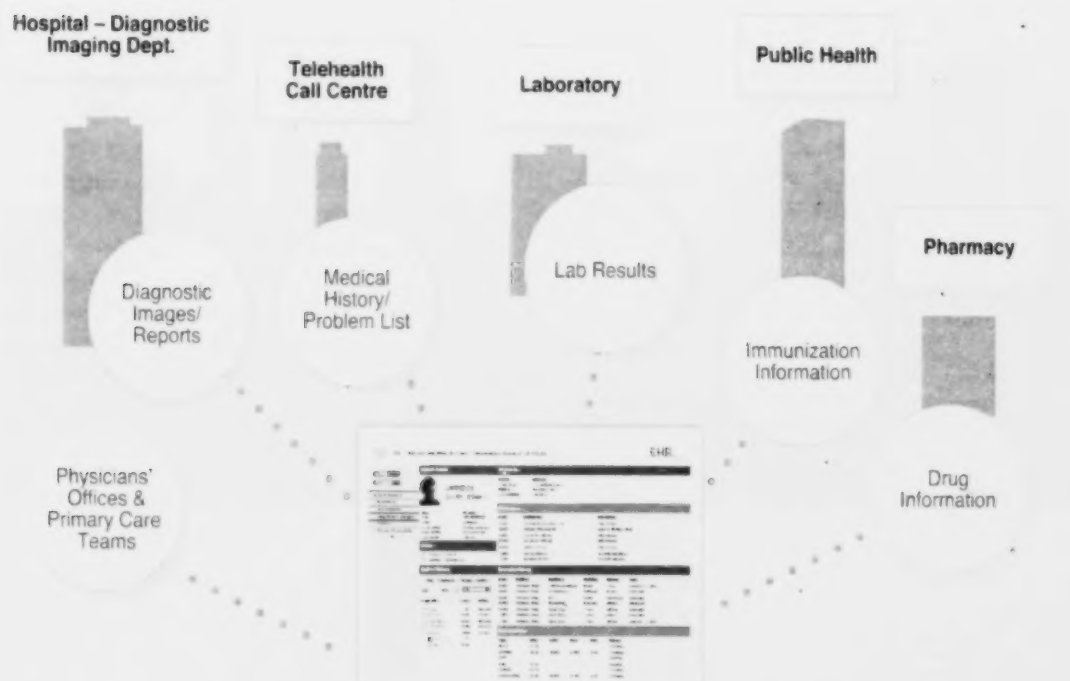
## The Interoperable Electronic Health Record - Progress by Core Business Area

Projects combine with registries and data warehouses to create the iEHR. (Figure 1)

The iEHR has three parts:

1. individual projects and data warehouses;
2. provincial registries and the HIAL (the glue that holds the iEHR components together);  
and,
3. provider systems (user access points).

**Figure 1: The Integrated Electronic Health Record (iEHR)**



(Image source - Canada Health Infoway)

# **iEHR Part I - Projects and Data Repositories (iEHR Components)**

## **Provincial RIS – PACS (Diagnostic Imaging) Project**

The Saskatchewan Radiology Information System (RIS) Implementation Project is a computer system for tracking patients and medical imaging procedures including exam scheduling, result reporting and billing. The RIS interfaces with existing hospital information systems to capture patient demographics and the orders used to schedule and complete the exam. As exams are completed, a radiologist will interpret the images and record the results in the RIS. The RIS interfaces with the Picture Archiving and Communication Systems (PACS) to link images and the interpreted results, making the full exam available to authorized users.

The Saskatchewan Picture Archiving and Communication System (PACS) interfaces with the medical imaging device (i.e.: x-ray, CT scan, MRI, ultrasound, etc.) to capture the image in a digital format. Once captured, the image can be stored, archived and securely shared over a computer network eliminating the use of traditional film as a presentation and storage medium.

In 2008-09 the Provincial RIS - PACS Project:

- implemented the PACS in Saskatoon Health Region for managing radiology images in November 2007, and began film-less operation on April 14, 2008;
- implemented the RIS in the Battlefords Union Hospital on February 10, 2009 followed with the PACS being implemented shortly thereafter. The Battlefords Union Hospital will begin film-less operation in the first week of April 2009; and,

- as of as of March 31, 2009, there were 350,797 studies and 19,560,706 images stored in the provincial PACS system.

## **Pharmaceutical Information Program (PIP) Drug Information System**

The Pharmaceutical Information Program Project (PIP) manages medication information in the province. The primary goal of PIP is to improve quality of care by providing the information and tools needed to make optimal drug therapy decisions.

In 2008-09 the Pharmaceutical Information Program Project:

- implemented the pan-Canadian drug information system message standard (CERx) into PIP in July 2008;
- three pharmacy systems began CERx system testing with the Saskatchewan Drug Information System (DIS);
- initiated communications with vendors for pharmacy systems and EMR software to open dialogue about integration with their systems; and,
- began an enhancements phase software upgrade for PIP, including paperless prescription and data archiving.

---

**Public Health Surveillance - Pan-Canadian  
Electronic Public Health Surveillance  
(Panorama)**

Panorama was designed to manage public health concerns such as SARS and pandemic influenza, both within and across provinces.

Panorama supports the daily operational needs of population health management including: immunization, communicable disease, outbreak management, inventory management, workflow management, and notification management.

In 2008-2009 the Panorama Project:

- maintained Saskatchewan's representation on the Pan-Canadian steering committee and the Jurisdictional Implementation, Business, and Technology working groups and supported the product development, testing, and enhancement activities of the build team; and,
- worked with the Ministry of Health and Canada Health Infoway to define the scope of the Saskatchewan project.

**The Saskatchewan Disease Control  
Laboratory (SDCL) Lab Information  
Management System (LIMS)**

A laboratory management system manages daily lab volumes and generates results on a timely basis.

The Saskatchewan Disease Control Laboratory (SDCL) requires a robust information system capable of meeting its technical and operational needs. The current Laboratory Information Management System (LIMS) was not meeting these objectives and a replacement solution was procured.

In 2008-09 the LIMS Project:

- completed the configuration (build) of the clinical components of the Laboratory Information Management System (LIMS);
- completed integrated and acceptance testing for all clinical components; and,
- interfaced analyzer instruments and automatic results faxing in preparation for clinical implementation during early 2009-10.

**Saskatchewan Laboratory Results  
Repository Project (SLRR)**

The Saskatchewan Laboratory Results Repository Project will provide timely and accurate laboratory test results to physician office computer systems and other secure locations using pan-Canadian standards.

In 2008-2009 the SLRR Project:

- completed design and software development for the electronic distribution of laboratory test results to physician office systems; and,
- continued to work on the design for the implementation of the laboratory test result repository and the display of laboratory test results through a physician web portal.

---

## **iEHR Part II - Registries and Access Layer (The iEHR “Glue”)**

### **The Health Information Access Layer (HIAL)**

The HIAL provides security, integration and consent software through which health data is securely transmitted between data warehouses and users. In addition to its data transmission role province-wide, this layer will eventually connect the Saskatchewan Electronic Health Record to the Pan-Canadian Electronic Health Record.

### **The Provider Registry System Project (PRS)**

The Provider Registry System stores and manages data about health care providers in Saskatchewan.

The PRS is the registry for health care providers licensed or registered by (but not limited to) the:

- College of Physicians and Surgeons
- College of Dental Surgeons of Saskatchewan
- Saskatchewan College of Pharmacists, and
- Saskatchewan Registered Nurses Association.

In 2008-09 the Provider Registry System Project:

- deployed in a new high-availability high-performance environment;
- set up regular feeds from source colleges/associations; and,
- developed a new security configuration that allows login from the health regions.

### **Person Health Registration System Replacement Project**

The Person Health Registration System is used to issue health services numbers (HSN) and plastic health cards used at health care facilities in the province.

This project is being undertaken to replace the current Person Health Registration System (PHRS).

In 2008-09, the Person Health Registration System Replacement Project:

- began the formal acceptance testing phase of the project;
- completed data conversion programs and began testing full data conversions; and
- built and began testing key interfaces with the Ministry of Health Drug Plan and the Ministries of Social Services and Advanced Education, Employment, and Labour.



---

## **iEHR Part III - Provider Systems (iEHR Access Points)**

### **Integrated Clinical Systems Implementations (ICS) for Health Regions**

ICS enables authorized health care providers to use a clinical viewer to quickly and securely access a summary of a patient's unique identifying information and relevant health information including home care, laboratory and pharmacy gathered from point-of-service computer systems.

In 2008-2009, these were completed:

- home care enhancements in the Sunrise and Kelsey Trail Health Regions;
- planning for the replacement of regional clinical laboratory information; and,
- provided software licenses required for implementations in the Regina Qu'Appelle Health Region including:
  - the clinical view system in the emergency department of the Regina Pasqua Hospital; and,
  - preparations for implementation in the Regina General Hospital emergency department in 2009.

### **Patient Access to Quality Care Project (PAQC)**

PAQC enhances and replaces the Chronic Disease Management Toolkit (CDM Toolkit). The CDM Toolkit was implemented in 2006 to support the Health Quality Council's Chronic Disease Management Collaborative providing clinicians with the ability to document clinical observations for their patients with chronic conditions and providing prompts for tests

and appointments that are due. The original implementation of the Toolkit supported diabetes and coronary artery disease chronic conditions, this will continue.

In 2008-09 the PAQC Project:

- completed planning; and,
- initiated development of the enhancements to the CDM Toolkit.

The Saskatchewan PAQC project will enhance the existing CDM Toolkit application in the following ways;

- add to the medical conditions tracked by the CDM Toolkit to include Chronic Obstructive Pulmonary Disease (COPD) and depression;
- improve the hardware platform that the application resides on so any qualified provider may be added;
- introduce it to practitioners who have not yet adopted the use of an EMR; and,
- add more users and more conditions to the application to improve quantity and quality of data to facilitate program and policy decisions from a provincial program perspective as well as a quality improvement perspective.

### **Electronic Medical Record (EMR)**

An electronic medical record is a secure computer-based system that enables the development of an electronic record of patient health information (also called an electronic medical chart).

An EMR allows primary care practices to set up flowsheets containing cues to help focus the visit. The information collected may include demographics, medical conditions and diagnoses, medications, immunizations, laboratory data, radiology reports, and other medical information. It allows physicians to bill for services electronically.

All EMRs selected and approved by the Saskatchewan Medical Association will have the capability of connecting with the provincial Electronic Health Record to exchange information, as various systems become available within the iEHR.

### **Primary Health Care Services**

Access to primary health services is essential for individuals, families and communities.

One method of serving these groups is through Primary Health Care teams. Technology enhances communication between members of these teams by linking providers with EMRs and the Electronic Health Record.

In 2008-2009, Primary Health Care Services:

- identified a single system for the Primary Health Care Solution;
- continued change management activities with initial Primary Health Services sites in preparation for implementation of the Primary Health Care Solution; and,
- assisted the Saskatchewan Medical Association (SMA) with their EMR selection process.

### **The Laboratory Information System (LIS) Replacement Project**

The LIS system facilitates the ordering of lab tests for patients, managing lab test data throughout the lab processing cycle; and generating and distributing result reports to clinicians, wards and other agencies.

The project will replace the current regional Laboratory Information Systems as the system will no longer be supported after February 2012.

In 2008-09 the Laboratory Information Replacement Project:

- completed planning and the software selection process; and,
- completed functional training for Sunrise, Kelsey Trail and Five Hills Health Regions.

### **Surgical Information System Project (SIS)**

The SIS Project will replace current computerized and manual paper-based surgical services systems in six health regions.

New applications, Operating Room Manager and SmarTrack, will be integrated with admitting, discharge and transfer (ADT) and materials management systems to support surgical bookings, intra-operative charting, surgical supply chain management and patient-resource management. In time, SIS will support surgical waitlists by meshing with the SSCN (Saskatchewan Surgical Care Network) Surgical Registry.

---

In 2008-2009, the Surgical Information System:

- confirmed business processes, requirements and design deliverables are aligned with participating health regions;
- developed a provincial surgical procedure file;
- determined all shared elements between Operating Room Manager and the SSCN Surgical Registry and continued development/testing;
- continued pre-implementation activity at Prince Albert Parkland Health Region; and,
- initiated surgical supply implementation at Cypress Health Region.

## **Canada Health Infoway Investment**

Infoway investments are directed towards improving the quality, accessibility, safety and productivity of Canada's healthcare system. Infoway primarily funds the development and adoption of Electronic Health Records. Infoway is an independent, non-profit, strategic investor that receives its funding from the federal government.

Together with the Saskatchewan Ministry of Health, SHIN is leading several concurrent projects which establish the foundation for the Electronic Health Record program and the advancement of the Saskatchewan provincial Electronic Health Record strategy.

SHIN leveraged \$7.7 million dollars of project funding for Electronic Health Record related projects in 2008-09 from Infoway.

In total, SHIN has signed agreements with Infoway for \$65 million dollars. To date, SHIN has received \$27.7 million dollars and will access the remaining \$37.3 million dollars, primarily for the iEHR-Lab, Public Health and Chronic Disease Manager Toolkit projects, in the future.

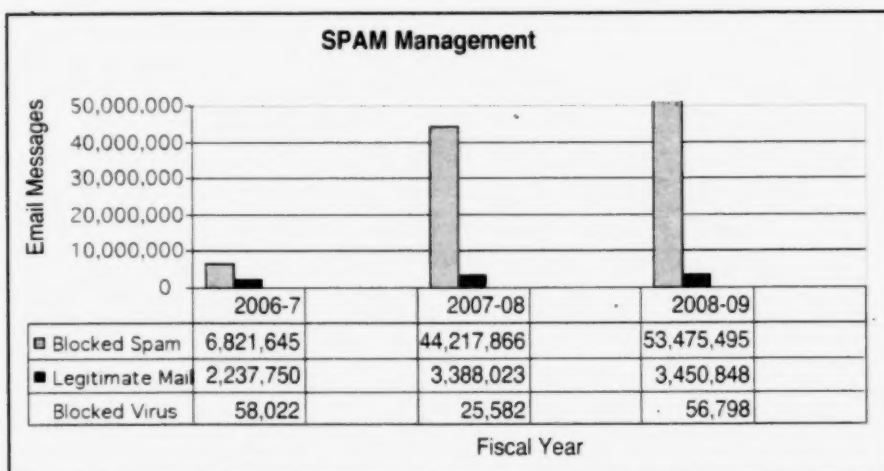
# Supporting the Electronic Communication Needs of the Ministry of Health and of Health Care Providers in the Regions

## Technology Support Services

SHIN maintains a secure network that provides authorized health care professionals with access to clinical information systems, supports the Telehealth network and provides e-mail infrastructure to all health regions and retail pharmacies across the province.

The network filters e-mail and blocks viruses and spam (junk e-mail and unsolicited bulk messages) from user's electronic mailboxes. Spam clogs up large amounts of bandwidth, increases fraud and decreases productivity. Most Internet spam can be categorized under marketing pitches, pornography, scams and hoaxes. The effectiveness of the spam management is shown in Figure 2, Spam Management.

**Figure 2**



## Service Desk

The Service Desk serves the Ministry of Health and health care staff across the province by providing end user assistance with computer problems and questions.

The Service Desk supports:

- all health regions;
- the College of Physicians and Surgeons of Saskatchewan;
- the Saskatchewan Cancer Agency;
- the Department of Family Medicine at the College of Medicine;

- the Saskatchewan Registered Nurses' Association;
- the Saskatchewan Association of Health Organizations (SAHO); and,
- the Ministry of Health.

As of March 31, 2009, 22,875 staff had access to the service desk; an increase of over 15 per cent, or 3,043 users, over March 31, 2008. (See Figure 3, SHIN Customer Growth).

**Figure 3**



Of the 91,538 calls received by the Service Desk in 2008-09, just over 39,000 had to be dealt with by regional technical resources, thereby reducing the demand on resources in the health sector.

In the 2008-09 annual survey of Service Desk system users, 95 per cent of respondents rated the service provided by the Service Desk as satisfactory or better, with 64 per cent indicating they received exceptional service.

SHIN is subject to *The Freedom of Information and Protection of Privacy Act* (FOIP) and *The Health Information Protection Act* (HIPA). Compliance with FOIP and HIPA are a priority and as an information management service provider, SHIN ensures that it has the highest standards in privacy protection and security of personal health information. Privacy and security provisions are integrated into all SHIN initiatives and operations.

# Privacy and Security

## Privacy Protection

Contracts and agreements with Saskatchewan health care organizations and service providers stipulate privacy protection as a top priority.

Project teams and program areas utilize the expertise of privacy professionals and tools such as Privacy Impact Assessments (PIAs). A PIA identifies risks and vulnerabilities associated with collection, modification, disclosure, storage, retention and disposal of personal health information. A PIA evaluates existing privacy protection and identifies alternative processes to mitigate potential privacy risks. It provides an analysis of how personal health information is managed to conform to privacy legislation, regulations, policies, procedures and best practices. The PIA process ensures strict attention is paid in the design of all SHIN projects and services to protect the confidentiality and integrity of data from accidental or deliberate threats. Accountability for privacy is incorporated to ensure every program and project complies with legislation including HIPA and FOIP.

SHIN participates as a member of Canada Health Infoway's Pan-Canadian Privacy Forum on Electronic Health Record Information Governance.

## Security

SHIN maintains standards, guidelines, operational technology and controls to protect against threats; ensuring the confidentiality, integrity and availability of information and services.

Security is maintained through firewalls, intrusion-detection software, virus-detection measures, server isolation, user access controls and encryption. The architecture is designed

to limit, control and monitor the access of information to approved individuals.

Investments continued in 2008-09 to complete the replacement and upgrades of regional and data centre devices and software to ensure they are up-to-date with the highest level of security. Redundancy (back up) of security devices has been put in place to ensure security and availability of hosted applications.

Authentication procedures ensure that access is only available to authorized personnel. Audit trails indicate when and who has accessed data.

SHIN works closely with other provinces, the Canadian Organization of Applied Computers in Health (COACH) and Canada Health Infoway to improve information security standards.

As technology advances and requirements evolve, SHIN continues to evaluate technologies, emerging standards, industry best practices, and project initiatives to ensure that they adequately reflect practical goals and objectives.

The following key milestones have been achieved in 2008-09:

- the Security Policy Framework was reviewed and updated in 2008;
- work on the provincial Chief Information Officer (CIO) Forum's Privacy and Security Sub-committees to establish provincial standards to protect personal privacy and ensure security uniformly across Saskatchewan continued;
- developed an education and awareness program that will be delivered to all ministry staff and consultants in 2009-10;

- developed a privacy and security incident reporting policy and process;
- introduced tools to conduct security assessments of new initiatives during the life cycle of the project; and,
- health stakeholders self-assessed security practices within their organizations with a common tool. The resulting information was de-identified and used to establish a baseline for the current state of security of health information in the province. This baseline provided enough information to develop a security strategy for the health sector in Saskatchewan.

## Other Services

### Data Centre

To meet the future demands of the Electronic Health Record, SHIN undertook an extensive review of the data centre. The review includes: network, storage, servers, physical space, power, air conditioning and operational support which formed the basis for a new three-year infrastructure strategic plan.

### Network

Infrastructure upgrades completed ensure high availability and redundancy to our clients. Redundancy refers to the backup hardware in place to allow for seamless failover. Failover is the ability to switch over automatically to a standby system during a failure or abnormal termination.

### Monitoring

Significant effort has been put forth to establish end-to-end network monitoring, reporting, alerting and logging systems, enabling HISC to proactively monitor the environment, resulting in faster response times, quicker resolutions and aids in future capacity planning.

### Telehealth

Implementation of a new Telehealth bridge increased performance, stability and scalability for Telehealth users.

### Community Net

CommunityNet has significantly expanded coverage, increased bandwidth at reduced costs, as well as enhanced redundancy. Additional network connections are planned at key facilities around the province to ensure uninterrupted network service.



## Management's Responsibilities

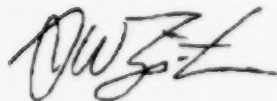
The accompanying financial statements included in the Annual Report for the year ended March 31st, 2009, are the responsibility of management.

Management has prepared these financial statements in accordance with generally accepted accounting principles in Canada, consistently applied using management's best estimates and judgments where appropriate.

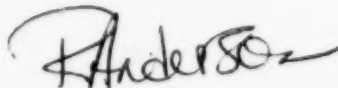
The Board is responsible for overseeing the business affairs of the corporation and also has the responsibility for approving financial statements. The Board fulfills these responsibilities by reviewing financial information prepared by management and discussing the relevant matters with management and external auditors.

Management maintains a system of internal controls to ensure the integrity of information that forms the basis of the financial statements. The internal controls provide reasonable assurance that transactions are recorded and executed in compliance with legislation and required authority; that assets are properly safeguarded; and that reliable records are maintained.

The Provincial Auditor of Saskatchewan has audited the financial statements. His report to the members of the Legislative Assembly precedes the financial statements.

A handwritten signature in black ink, appearing to read 'SL' with a stylized flourish.

Scott Livingstone  
Chief Executive Officer – SHIN

A handwritten signature in black ink, appearing to read 'Anderson' with a stylized flourish.

Roseann Anderson, CMA  
Chief Financial Officer - SHIN



## Financial Overview

The Treasury Board Corporation SHIN is responsible for setting and approving the yearly financial plan for the Corporation. For 2008-09, SHIN's financial position showed significant increase with the acquisition of tangible capital assets at \$19,387,000.

For 2008-09, SHIN is reporting an underexpenditure of \$6,863,000, which will be described in the paragraphs below.

### Revenue

The Saskatchewan Health Information Network (SHIN) received funding from multiple sources. Grants from the Saskatchewan Ministry of Health for 2008-09 were budgeted at \$37,529,000. SHIN's yearly grant and utilization of deferred revenue and revenue from individual ministry branches was \$19,065,000. Actual revenue of \$33,762,000 resulted in a variance of (\$3,767,000). The variance, \$1,095,000, is mainly due to the increase in recoverable work provided to the ministry and the deceleration of projects which resulted in less deferred revenue being recognized than budgeted (\$4,945,000). This deferred revenue will continue to be available in 2009-10.

Canada Health Infoway provides funding to accelerate the implementation and adoption of Electronic Health Record initiatives in Canada. Funding from Infoway provides for one-time investments in new technology, software, infrastructure and implementation service fees. 2008-09 Infoway funding totaled \$7,729,000 and compares to budgeted revenue in the amount of \$8,519,000 resulting in a variance of (\$790,000). This variance results from projects not moving forward as quickly as anticipated. Any approved funding from Infoway that was not utilized (\$790,000) will continue to be available in the 2009-10 year to be used in our capital expenditure planning.

Actual interest and other revenue is \$1,395,000, compared to budgeted revenue of \$2,068,000. The majority of the variance of (\$673,000) is a result of work delayed that would normally result in recoveries from third parties.

### Amortization

SHIN budgets using the cash flow method and therefore has not budgeted amortization.

### Community Net

Telecommunications for 2008-09 reported expenditures of \$3,540,000 compared to budgeted expenditures of \$3,405,000, resulting in an unfavourable variance of (\$135,000). This includes monthly charges from SaskTel and Saskatchewan Property Management Corporation for data communications within the province.

### Corporate Services

Corporate Services for 2008-09 reported expenditures of \$1,620,000 compared to budgeted expenditures of \$2,408,000 resulting in a favourable variance of \$788,000. Expenditures from Corporate Services include accommodation costs, administration costs, legal services and other program areas such as architecture, information management, standards and change management. The majority of the variance can be attributed to difficulty in recruiting skilled staff.

### Infrastructure

Infrastructure for 2008-09 reported expenditures of \$213,000 compared to budgeted expenditures of \$2,399,000 resulting in a favourable variance of \$2,186,000. The favorable variance results

from infrastructure items being capitalized on the balance sheet rather than expensed on the statement of operations.

## Operations

Operations for the 2008-09 year reported expenditures of \$19,271,000.

Operation costs support the core business activities of SHIN and include contracted resources for service desk, change control, business support, knowledge management and network resources.

Data Centre hosting reported expenditures of \$297,000 compared to a budget of \$156,000 resulting in an unfavourable variance of (\$141,000).

Major improvements report actual expenses of \$2,931,000 compared to budgeted expenses of \$1,350,000 resulting in an unfavourable variance of (\$1,581,000). The variance is attributed to system upgrades which were not originally budgeted.

Actual resource costs include \$8,325,000 compared to a budgeted amount of \$8,896,000 reporting a favourable variance of \$571,000. This variance is attributed to the difficulty in recruiting skilled staff.

Infrastructure leases report expenses of \$1,089,000 compared with a budget of \$1,674,000 resulting in a favourable variance of \$585,000. This variance is mainly due to purchasing rather than leasing equipment in 2008-09.

Software and hardware maintenance reported expenditures of \$6,032,000 for the year compared to a budget of \$5,503,000 resulting

in an unfavourable variance of (\$529,000). This variance results from the purchase of software resulting in increased software maintenance.

Communication fees report actual expenditures of \$597,000 compared to a budget of \$730,000 resulting in a favourable variance of \$133,000.

---

**Saskatchewan Health Network  
2008-2009 Financial Statements**

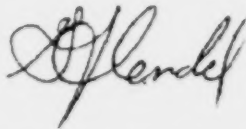
# Auditor's Report

To: The Members of the Legislative Assembly of Saskatchewan

I have audited the statement of financial position of the Saskatchewan Health Information Network as at March 31, 2009 and the statements of operations, change in net financial assets, and cash flows for the year then ended. The Corporation's management is responsible for preparing these financial statements for Treasury Board's approval. My responsibility is to express an opinion on these financial statements based on my audit.

I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In my opinion, these financial statements present fairly, in all material respects, the financial position of the Corporation as at March 31, 2008 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.



Regina, Saskatchewan  
June 3, 2009

Fred Wendel, CMA, CA  
Provincial Auditor

# Statement 1

## Saskatchewan Health Information Network Statement of Financial Position as at March 31, 2009

(thousands of dollars)

	March 31, 2009	March 31, 2008
<b>Financial Assets</b>		
Due from General Revenue Fund (Note 3)	\$ 13,683	\$ 17,361
Receivable from Ministry of Health	2,226	652
Other Accounts Receivable	9,492	6,876
	<u>25,401</u>	<u>24,889</u>
<b>Liabilities</b>		
Accounts Payable and Accrued Liabilities	5,077	1,463
Deferred Revenue (Note 11)	18,778	20,254
Obligations Under Capital Leases	1,216	811
	<u>25,071</u>	<u>22,528</u>
<b>Net Financial Assets (Statement 3)</b>	<u>330</u>	<u>2,361</u>
<b>Non-financial Assets</b>		
Tangible Capital Assets (Note 5)	59,591	51,583
Prepaid Assets	2,416	1,530
	<u>62,007</u>	<u>53,113</u>
<b>Accumulated Surplus (Statement 2)</b>	<u>\$ 62,337</u>	<u>\$ 55,474</u>

(See Accompanying Notes to Financial Statements)

## Statement 2

### Saskatchewan Health Information Network Statement of Operations for the year ended March 31, 2009

(thousands of dollars)

	<u>March 31, 2009</u> (Budget-Note 4)	<u>March 31, 2009</u>	<u>March 31, 2008</u> (Note 13)
<b>Revenue</b>			
Grants from Ministry of Health	\$ 37,529	\$ 33,762	\$ 32,263
Canada Health Infoway Funding	8,519	7,729	8,360
Interest and Other Revenue	2,068	1,395	673
	<u>48,116</u>	<u>42,886</u>	<u>41,296</u>
<b>Expenses</b>			
Amortization	-	11,379	7,046
CommunityNet	3,405	3,540	3,126
Corporate Services	2,408	1,620	1,241
Infrastructure	2,399	213	507
Data Centre	156	297	284
Major Improvements	1,350	2,931	3,006
Operational Consulting Services	8,896	8,325	6,309
Operational Leasing\Supplies	1,674	1,089	989
Operational Software\Hardware Maint.	5,503	6,032	2,302
Operational Telecommunications	730	597	642
	<u>26,521</u>	<u>36,023</u>	<u>25,452</u>
<b>Annual Surplus</b>	\$ 21,595	\$ 6,863	\$ 15,844
Accumulated Surplus, at beginning of year		55,474	39,630
<b>Accumulated Surplus, at end of year (Statement 1)</b>		<u>\$ 62,337</u>	<u>\$ 55,474</u>

(See Accompanying Notes to Financial Statements)

# Statement 3

## Saskatchewan Health Information Network Statement of Change in Net Financial Assets for the year ended Marc. 31, 2009

(thousands of dollars)

	<b>March 31, 2009</b>	<b>March 31, 2008</b>
<b>Annual Surplus</b>	\$ 6,863	\$ 15,844
Acquisition of Tangible Capital Assets	(19,387)	(21,984)
Amortization of Tangible Capital Assets	11,379	7,046
	(8,008)	(14,938)
Use of Prepaid Assets	(886)	(48)
	(886)	(48)
<b>Increase in Financial Assets</b>	\$ (2,031)	\$ 858
<b>Net Financial Assets at beginning of year</b>	2,361	1,503
<b>Net Financial Assets at end of year (Statement 1)</b>	\$ 330	\$ 2,361

(See Accompanying Notes to Financial Statements)

# Statement 4

## Saskatchewan Health Information Network Statement of Cash Flows for the year ended March 31, 2009

(thousands of dollars)

	March 31, 2009	March 31, 2008
<b>Cash Flows From (Used In) Operating Activities</b>		
Cash Receipts	\$ 37,220	\$ 55,838
Cash Paid to Suppliers and Others	(21,916)	(20,859)
<b>Increase in Operating Activities for the year</b>	<u>15,304</u>	<u>34,979</u>
<b>Cash Flows Used in Investing Activities</b>		
Purchase of Tangible Capital Assets	(19,387)	(21,984)
<b>Decrease in Investing Activities for the year</b>	<u>(19,387)</u>	<u>(21,984)</u>
<b>Cash Flows from Financing Activities</b>		
Net Change in Obligations under Capital Leases	405	561
<b>Increase in Financing Activities for the year</b>	<u>405</u>	<u>561</u>
<b>Net (Decrease)/Increase in Due from General Revenue Fund</b>	(3,678)	13,556
<b>Due from General Revenue Fund, beginning of the year</b>	17,361	3,805
<b>Due from General Revenue Fund, end of the year</b>	<u>\$ 13,683</u>	<u>\$ 17,361</u>

(See Accompanying Notes to Financial Statements)



# Notes to the Financial Statements

## Saskatchewan Health Information Network Notes to the Financial Statements for the year ended March 31, 2009

(thousands of dollars)

### 1. Description of Business

The Saskatchewan Health Information Network (SHIN) was established as a Treasury Board Crown Corporation by Order in Council 581/1997 under the provisions of *The Crown Corporations Act*, 1993 (Act) effective August 19, 1997.

SHIN was created to design, implement, own, operate, and manage a provincial health information network. SHIN's purpose is to foster the development of the health information technology sector, to foster re-engineering of health delivery processes and to protect health information as a strategic resource.

### 2. Significant Accounting Policies

Pursuant to standards established by the Public Sector Accounting Board (PSAB), SHIN is classified as an other government organization. SHIN uses Canadian generally accepted accounting principles applicable to governments. The following principles are considered to be significant:

- a) **The Basis of Accounting**  
The financial statements are prepared on the accrual basis of accounting.
- b) **Revenue**  
Revenues are recognized in the period in which the transactions or events occurred that gave rise to the revenues.
- c) **Expenses**  
Expenses represent the cost of resources consumed during the year for operations. Expenses include provision for the amortization of tangible capital assets.
- d) **Tangible Capital Assets**  
Tangible capital assets are recorded at cost and are amortized over their useful life. Amortization is recorded, commencing with the quarter after the assets are placed into service, on a straight-line basis at the annual rates set out below:

Desktop Computer Hardware	33%
Computer Software	33%
Network Hardware, Software & System Development costs	20%
Office Equipment	20%
Office Furniture	10%

e) **Non-financial assets**

Tangible capital and other non-financial assets are accounted for as assets because they can be used to provide services in future periods. These assets do not normally provide resources to discharge liabilities unless they are sold.

f) **Measurement Uncertainty**

The preparation of financial statements in accordance with Canadian generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amount of financial assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenues and expenses during the reporting period. These estimates are reviewed periodically, and, as adjustments become necessary, such adjustments are reported in earnings in the period in which they become known.

**3. Due from the General Revenue Fund**

SHIN's bank account is included in the Consolidated Offset Bank Concentration arrangement for the Government of Saskatchewan.

Earned interest is calculated and paid by the General Revenue Fund on a quarterly basis into the Corporation's bank account using the Government's thirty-day borrowing rate and SHIN's average daily account balance. The Government's average thirty-day borrowing rate in 2009 was 1.95% (2008 - 4.08%).

**4. Budget Approval**

SHIN's budget is approved by the Board.

**5. Tangible Capital Assets**

	March 31, 2009						March 31, 2008
	Desktop Computer Hardware & Software	Computer Network Hardware	Licensed or Multiple Application Software	Office Furniture & Equipment	System Development Costs	Total	Total
Opening Cost	\$ 1,074	\$ 7,047	\$ 6,898	\$ 1,054	\$ 79,353	\$ 95,426	\$ 73,442
Additions During the Year	-	2,041	1,012	162	16,172	19,387	21,984
Disposals	-	-	-	-	-	-	-
Closing Cost	\$ 1,074	\$ 9,088	\$ 7,910	\$ 1,216	\$ 95,525	\$114,813	\$ 95,426
Opening Accumulated Amortization	\$ 1,074	\$ 5,787	\$ 6,898	\$ 598	\$ 29,486	\$ 43,843	\$ 36,797
Annual Amortization	-	797	69	118	10,395	11,379	7,046
Disposals	-	-	-	-	-	-	-
Closing Accumulated Amortization	\$ 1,074	\$ 6,584	\$ 6,967	\$ 716	\$ 39,881	\$ 55,222	\$ 43,843
<b>Total Tangible Capital Assets</b>	<b>\$ -</b>	<b>\$ 2,504</b>	<b>\$ 943</b>	<b>\$ 500</b>	<b>\$ 55,644</b>	<b>\$ 59,591</b>	<b>\$ 51,583</b>

Included in the System Development Cost are \$19,802 (2008 - \$19,138) invested in systems that are currently not in production and therefore not amortized.

## 6. Maintenance Agreements for Software

SHIN has several agreements with software vendors to provide maintenance for software that has been purchased. A total of \$5,885 was spent in 2009 (2008 - \$2,229) and these will likely continue into the future.

## 7. Related Parties

These financial statements include routine transactions with related parties. SHIN is related to all Saskatchewan Crown agencies such as ministries, corporations, boards and commissions under the common control of the Government of Saskatchewan. Related party transactions to March 31, 2009, include the following:

	March 31, 2009	March 31, 2008
Revenue	\$	\$
Regional Health Authorities	561	1
Health Quality Council	7	51
Saskatchewan Association of Health Organizations	197	342
Accounts Receivable	\$	\$
Regional Health Authorities	538	-
Health Quality Council	7	-
Saskatchewan Association of Health Organizations	191	233
Expenditures	\$	\$
Regional Health Authorities	872	1,920
Health Quality Council	-	1
Ministry of Government Services	2,184	2,138
Saskatchewan Association of Health Organizations	195	402
Saskatchewan Cancer Agency	-	1
Saskatchewan Opportunities Corporation	568	456
SaskTel	2,141	1,591
Saskatchewan Workers' Compensation Board	18	9
Accounts Payable	\$	\$
Regional Health Authorities	446	70
Ministry of Government Services	191	168
Saskatchewan Association of Health Organizations	1	32
SaskTel	235	-

Other transactions with related parties and amounts due to/from them are described separately in the financial statements and the notes thereto.

Routine operating transactions with related parties are recorded at the rates charged by those organizations and are settled on normal trade terms. In addition, SHIN pays Provincial Sales Tax to the Saskatchewan Ministry of Finance on all its taxable purchases.

The Ministry of Health provides management and technical services to SHIN without charge.

#### 8. Financial Instruments

SHIN's financial instruments include due from the General Revenue Fund, accounts receivable and accounts payable. The carrying amount of these instruments approximates fair value due to their short-term nature. These instruments have no interest or credit risk.

#### 9. Capital Lease

SHIN currently has six capital leases on equipment with certain Canadian financial service companies. The minimum annual lease payment for the capital lease over the next five years is as follows.

2010	\$479
2011	479
2012	311
2013	216
2014	-
Total Minimum Lease Payments	\$1,485
Less Amount Representing Interest	(123)
Total Obligation	\$1,362
Less Expense Related to Maintenance	(\$146)
Balance of the Obligation	\$1,216

#### 10. Operating Leases

SHIN has entered into a lease agreement with Saskatchewan Opportunities Corporation, a related party, for office space, which expires on April 30, 2014. The operating lease payments for the following six years are as follows:

2010	\$480
2011	493
2012	493
2013	493
2014	493
2015	41
Total Lease Payments	\$2,493

SHIN has entered into several lease agreements with a financial services company for equipment. The operating lease payments over the next three years are as follows:

2010	\$422
2011	115
2012	8
Total Lease Payments	\$545

## 11. Deferred Revenue

As of March 31, 2009, SHIN's deferred revenue balance is \$18,778 (2008 - \$20,254). Deferred revenue is only used once all project planning and due diligence (including stakeholder readiness) is completed and other revenue opportunities (such as Canada Health Infoway) are maximized. The deferred revenue consists of unspent amounts provided by the Ministry of Health and Canada Health Infoway, which are committed to developing information technology systems that support frontline delivery, improve access, quality and efficiency of care.

Deferred Revenue	April 1, 2008-09	2008-2009 Expenditures	Additional Funds	March 31, 2009
<i>First Ministers Funding</i>				
Saskatchewan Laboratory Results Reporting	\$ 302	\$ 302	\$ -	\$ -
Provincial Lab Replacement	13	13	-	-
ESP Staff Scheduling Project	976	193	-	783
<i>Total First Ministers Funding</i>	<i>\$ 1,291</i>	<i>\$ 508</i>	<i>\$ -</i>	<i>\$ 783</i>
<i>Other Deferred Revenue</i>				
Canada Health Infoway	\$ 4,146	\$ 686	\$ 1,454	\$ 4,914
Saskatchewan Health Pay Forward	12,000	9,930	8,000	10,070
EMS Dispatch	304	-	-	304
Drug Plan Enhancements	-	-	695	695
Renal Data Management	120	-	-	120
Diagnostic Imaging Decision Support	-	63	250	187
Primary Health Care Information sites	2,043	535	-	1,508
Canadian Health Outcomes for Better Information and Care	80	148	80	12
Telehealth Initiatives	210	85	-	125
Physician referral Guide Website Development	60	-	-	60
<i>Total Other Deferred Revenue</i>	<i>\$ 18,963</i>	<i>\$ 11,447</i>	<i>\$ 10,479</i>	<i>\$ 17,995</i>
<b>Total Deferred Revenue</b>	<b>\$ 20,254</b>	<b>\$ 11,955</b>	<b>\$ 10,479</b>	<b>\$ 18,778</b>

## 12. Commitments

As of March 31, 2009, SHIN is committed to developing information technology applications totalling \$4,591 (2008 - \$6,814) and technical support for internal and regional IT systems totalling \$2,111 (2008 - \$1,660). The following table outlines the funds dedicated for capital and operational expenditures.

Commitments	Total Budgeted Costs	Total Expenditures March 31, 2009	Total Commitments March 31, 2009
Capital Projects	\$8,176	\$3,585	\$4,591
Operational Services	3,427	1,316	2,111
<b>Total Commitments</b>	<b>\$11,603</b>	<b>\$4,901</b>	<b>\$6,702</b>

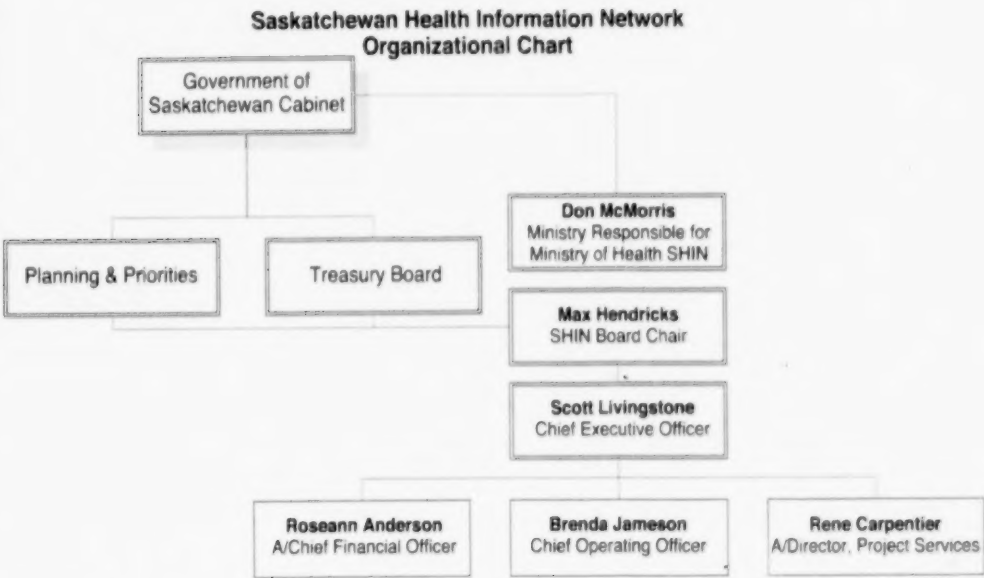
## 13. Comparative Figures Notes

Prior year figures have been reclassified to conform to present year presentation.

# Appendix I

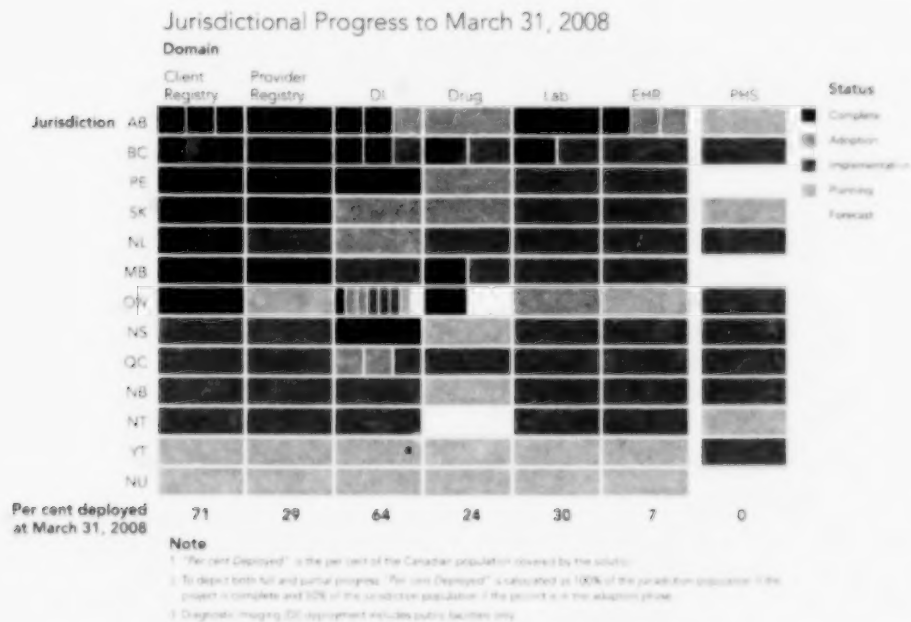
## Organizational Structure

### Saskatchewan Health Information Network Organizational Chart

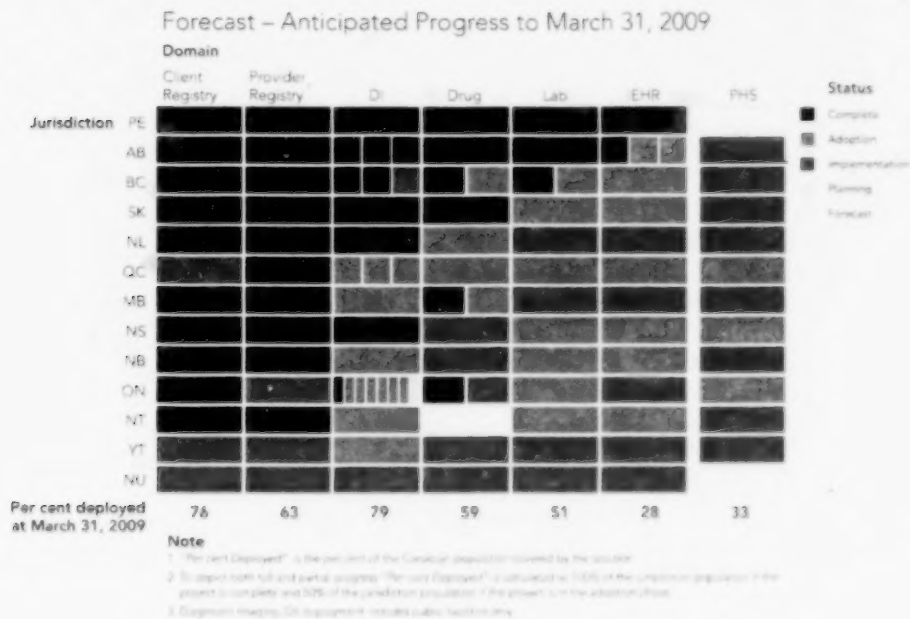


## Appendix II

### Canada Health Infoway ranking of Canadian provinces progress to March 31, 2008



### Canada Health Infoway ranking of Canadian provinces anticipated progress to March 31, 2009 (page 16 of <http://www.infoway-inforoute.ca/flash/ar-bp/en/ar/index.html>)



## Appendix III

### Acronyms

AVERT	Application Verification Toolkit
CDM	Chronic Disease Manager
CEO	Chief Executive Officer
CERx	Pan-Canadian drug information system message standard
CIO	Chief Information Officer
COACH	Canadian Organization of Applied Computers in Health
COPD	Chronic Obstructive Pulmonary Disease
CT scan	Computed Axial Tomography (also known as a CAT scan)
DIS	Drug Information System
EHR	Electronic Health Record
EMR	Physician Electronic Medical Record
HISC	Health Information Solutions Centre
HQC	Health Quality Council
HSN	Health Services Number
IHR	Integrated Electronic Health Record
ICS	Integrated Clinical Systems
LIMS	Laboratory Information Management System
LIS	Laboratory Information System
MRI	Magnetic Resonance Imaging
OIPC	Office of the Saskatchewan Information and Privacy Commissioner
PACS	Picture Archiving and Communication System
PAQC	Patient Access to Quality Care Project
PHI	Personal Health Information
PIA	Privacy Impact Assessment
PIP	Pharmaceutical Information Program
PRS	Provider Registry System
RIS/PACS	Radiology Information System Picture Archiving and Communication System
SAHO	Saskatchewan Association of Health Organizations
SDCL	Saskatchewan Disease Control Laboratory (formerly known as the Provincial Laboratory)
SHIN	Saskatchewan Health Information Network
SIS	Surgical Information System
SLRR	Saskatchewan Laboratory Results Repository Project
SMA	Saskatchewan Medical Association
SSCN	Saskatchewan Surgical Care Network (Surgical Registry)



